

Notice of Allowability

Application No.

10/688,018

Examiner

Susanna M. Diaz

Applicant(s)

MYR ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Examiner's amendment agreed to on June 22, 2007.
2. ☒ The allowed claim(s) is/are 3-6, 9, 10, 12-16 and 18-44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received:
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Susanna Diaz
SUSANNA M. DIAZ
PRIMARY EXAMINER

AU3694

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lawrence Ashery (Reg. No. 34,515) on June 22, 2007.

The application has been amended as follows:

Cancel Claim 1.

In claim 3, line 1, delete "marketing" and replace "1" with --44--.

In claim 4, line 1, delete "marketing" and replace "1" with --44--.

In claim 5, line 1, delete "marketing" and replace "1" with --44--.

In claim 6, line 1, delete "marketing" and replace "1" with --44--.

In claim 9, line 1, delete "marketing" and replace "1" with --44--.

In claim 10, line 1, delete "marketing" and replace "1" with --44--.

In claim 12, line 1, delete "marketing" and replace "1" with --44--.

In claim 13, line 1, delete "marketing" and replace "1" with --44--.

In claim 14, line 1, delete "marketing" and replace "1" with --44--.

In claim 15, line 1, delete "marketing" and replace "1" with --44--.

In claim 16, line 1, delete "marketing" and replace "1" with --44--.

Cancel Claim 17.

In claim 18, line 1, delete "marketing".

In claim 18, line 2, replace "17" with --44--.

In claim 19, line 1, delete "marketing" and replace "17" with --44--.

In claim 20, line 1, delete "marketing".

In claim 20, line 2, replace "17" with --44--.

In claim 21, line 1, delete "marketing".

In claim 21, line 2, replace "17" with --44--.

In claim 22, line 1, delete "marketing".

In claim 22, line 2, replace "17" with --44--.

In claim 23, line 1, delete "marketing".

In claim 23, line 2, replace "17" with --44--.

In claim 24, line 1, delete "marketing".

In claim 24, line 2, replace "17" with --44--.

In claim 25, line 1, delete "marketing".

In claim 25, line 2, replace "17" with --44--.

In claim 26, line 1, delete "marketing".

In claim 26, line 2, replace "17" with --44--.

In claim 27, line 1, delete "marketing".

In claim 27, line 2, replace "17" with --44--.

In claim 28, line 1, delete "marketing" and replace "17" with --44--.

In claim 29, line 1, delete "marketing".

In claim 29, line 2, replace "17" with --44--.

In claim 30, line 1, delete "marketing".

In claim 30, line 2, replace "17" with --44--.

In claim 31, line 1, delete "marketing".

In claim 31, line 2, replace "17" with --44--.

In claim 32, line 1, delete "marketing".

In claim 32, line 2, replace "1" with --44--.

In claim 37, line 1, delete "marketing".

In claim 37, line 2, replace "1" with --44--.

44. (Currently Amended) A ~~marketing~~ decision support system for ~~a supermarket~~ that uses a merchandising parameter including a revenue or a profit, the ~~marketing decision support system~~ comprising:

a ~~prediction module~~ means for predicting a product demand for a plurality of non-identical products in a target period using predetermined purchasing data and predetermined pricing factors for the plurality of non-identical products;

an ~~optimization module~~ means for optimizing a price and a promotion schedule of at least one of the non-identical products for the target period, the optimization ~~module~~ means maximizing the merchandising parameter based on the predicted product demand for the plurality of non-identical products; and

a database for storing the predetermined purchasing data, the predetermined pricing factors, the optimized price and the optimized promotion schedule; the predetermined purchasing data including scanner data or historical purchase data that contains at least a date of purchase, a time of purchase, a bar code, a quantity bought and a price at the time of purchase;

means for modeling and optimization of joint effects of the predetermined purchasing data and the predetermined pricing factors, said predetermined pricing factors including one or more of product brands, sales discounts, quantity discounts, promotion schedules, days of the week, pre-holiday days, post-holiday days, year seasons, and past sales histories of the plurality of non-identical products ;

means for data mining of the said historical database that performs aggregation of individual sale and promotion records into data batches corresponding to user-selected or system-determined time periods, and of extracting the contents of database fields corresponding to the said predetermined pricing factors;

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means for construction of an integrated pricing and promotion regression model or of a set of integrated pricing and promotion regression models to model joint effects of the plurality of said predetermined purchasing data and said predetermined pricing factors including pricing and promotion variables on the product demand of the plurality of non-identical products on sale;

means for simultaneous estimation of said integrated pricing and promotion regression model or said set of integrated pricing and regression models and for separate stepwise estimation;

means for construction of the predicted demand for products in categories with substitute demands and with complementary demands;

means for separately demonstrating effects of prices on said predicted product demand in said categories based on said means for estimation;

means for separately demonstrating effects of display times of a plurality of promotion clips running on in-store monitors on said predicted product demand in said categories based on said means for estimation;

means for providing said database containing filtered data used for estimation computations, the filtered data including fields directly corresponding to regression factors in said integrated pricing and promotion regression models, and storing them in a format for reading and processing;

the optimization means further:

- a) for optimizing a selected merchandising parameter for user-selected single products under regular sales conditions;
- b) for optimizing a selected merchandising parameter for user-selected product groups under regular sales conditions;

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c) for optimizing a selected merchandising parameter for user-selected single products under clearance sales conditions;

d) for optimizing a selected merchandising parameter for user-selected product groups under clearance sales conditions;

e) for constructing scenario reports that contains information units in tabled and graphical forms, the information units including a scenario task specification, all group profits, all group revenues, a group availability, an individual group task specification, individual group product pricing, individual group product profits, individual group product revenues, individual group product sales volumes, and individual group product availability, and

for allowing a user to review price changes computed by the optimization system and to register a consent to the price changes through a password-protected channel between a user interface and the system prior to any implemented price changes .

Reasons for Allowance

2. Claims 3-6, 9, 10, 12-16, and 18-44 are allowed.

3. The following is an examiner's statement of reasons for allowance:

The following references disclose various aspects of price optimization, promotion planning, and making related predictions: Ouimet (US 2004/0049470), Ouimet (US 2004/0210543), Delurgio et al. (U.S. Patent No. 7,092,918), Cunningham et al. (U.S. Patent No. 6,029,139), Feng et al. (US 2004/0267676), Cohen et al. (US

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2004/0002900), von Gonten et al. (US 2003/0065555), Dvorak et al. (U.S. Patent No. 7,092,929), Jinba (JP 2000-357186 A), Ichida et al. (JP 2001-331691 A), Pauwels et al. ("The Long-Term Effects of Price Promotions on Category Incidence, Brand Choice, and Purchase Quantity"), and Achabal et al. ("A Decision Support System for Vendor Managed Inventory"). The aforementioned references each teach various aspects of the claimed invention; however, these references neither individually teach all of the claimed limitations nor do they suggest the combination of all of the features recited in independent claim 44 into one single, integrated decision support system. Therefore, claims 3-6, 9, 10, 12-16, and 18-44 are deemed to be allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Susanna M. Diaz
Primary Examiner
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June 22, 2007